131 Elden St. Suite 200

Herndon, VA 20170

Phone: 703.456.0123

Fax: 703.456.0133

**April 3, 2006** 

NASA Software of the Year Award Committee Ames Research Center Moffett Field, CA 94035

## To Whom It May Concern:

Severe Weather season is just around the corner, and the aviation community is excited at the prospect of a new technology being introduced this spring: the Airspace Flow Program (AFP). Most air travelers have likely experienced the delays, cancellations, excessive airborne holding, and even diversions that occur during convective weather season. These severe weather events are particularly disruptive because they cover broad areas of geography and are very difficult to predict. However, relief is now in sight and AFP is scheduled for deployment in the May-June 2006 time frame.

The speed with which the community has gone from problem identification to concept development to deployment is uncanny: less than two years. The secret to this rapid process has been a powerful NASA-developed technology known as FACET. The FACET technology has been used in the following phases of AFP:

- 1. Problem identification: FACET was applied to characterize and demonstrate the inefficiencies associated with the use of Ground Delay Programs (GDPs) to mange severe weather events.
- 2. Concept Development: FACET, partnered with another NASA technology, CRRAT, was used to demonstrate the benefits of viable alternatives to the use of Ground Delay Programs (GDPs).
- 3. Concept refinement/procedure development: FACET, in concert with the FAA's Jupiter Simulation Environment, played a critical role in the many human-in-the-loop (HITL) simulations performed with Air Traffic Managers and system operators to flesh out the operational details and develop the operational procedures.
- 4. Metrics Development: Finally, FACET has been instrumental in developing the metrics program for AFP and is considered an invaluable tool for the post-analysis activities that will follow AFP deployment.



Metron Aviation, Inc, a research and development firm under contract to the FAA's System Operations Programs office, has been directly involved in numerous Traffic Flow Management (TFM) deployments over the past 15 years. I don't believe any have been has complex as AFP, not even the original deployment of the Flight Schedule Monitor (FSM) in 1998. And FSM took 6 years to go from concept to very limited deployment.

The difference this time has been FACET, which helped the entire community refine AFP, lower the risks of deployment, and significantly streamline the deployment schedule. I expect that FACET will continue to play a critical role in the anticipated evolution of AFP in the months and years to come.

Kudos to NASA Ames! You have found a smarter, faster and better way to do things.

Regards,

Michael C. Wambsganss

CEO, Metron Aviation, Inc.